

Notice of Allowability

Application No.

09/894,396

Applicant(s)

OKANOUE ET AL.

Examiner

Stephen M. D'Agosta

Art Unit

2683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 11-08-04.
2. ☒ The allowed claim(s) is/are 5,7,9-11,13,15,20,22,24-26,28,30,35,37-41,43,45,50,52,54-56,58 and 60-132.
3. ☒ The drawings filed on 28 June 2001 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

DETAILED ACTION

Response to Arguments

The applicant's amendment filed 11-8-04 overcomes the examiner's prior art rejection. **Claims 5, 7, 9-11, 13, 15, 20, 22, 24-26, 28, 30, 35, 37-41, 43, 45, 50, 52, 54-56, 58 and 60-132 are allowed.**

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Ian Blum on 12-20-2004.

- The examiner notes on page 20 of the amendment, claim 48 should have been crossed out and identified as "cancelled" since the amendment states (top of page 20) that Claims 46-49 have been cancelled.
- Please replace claims 37, 63, 69, 75 and 81 as follows:

37. (Currently amended) A user terminal for use in a propagation environment notification system in a radio communication system constituted by a radio base station and a radio terminal, comprising:

condition sending means for sending conditions about the user's area placement from a user terminal to an object apparatus via a communication line; and

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information receiving means for receiving radio propagation environment information for said conditions from said object apparatus via the communication line;

wherein said condition sending means comprises:

start command sending means for sending a service start command from said user terminal to said object apparatus;

condition inputting means for inputting said conditions from said user terminal based on software for clients of predetermined form sent to said user terminal from said object apparatus receiving said service start command; and

second condition sending means for sending said conditions from said user terminal to said object apparatus;

~~The user terminal according to Claim 32,~~ wherein said software for clients comprises:

processing of obtaining said conditions;

processing of converting said conditions into formats capable of being used in processing on said object apparatus's part; and

format conversion and display processing for presenting to the user said radio propagation environment information obtained through the processing on said object apparatus's part;

~~The user terminal according to Claim 33,~~ wherein said software for clients comprises:

an editor portion for said processing of obtaining conditions; and

a display portion for said display processing.

wherein said editor portion has a function of having appliance placement specific of each user and so on inputted from said user terminal and converting user specific information such as said appliance placement into a predetermined format.

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63. (Currently amended) A propagation environment notification method in a radio communication system constituted by a radio base station and a radio terminal, comprising:

a first step of sending conditions about a user's area layout from a user terminal to a server via a communication line;

a second step of generating said user's area radio propagation environment information based on said conditions by said server receiving said conditions; and

a third step of sending said radio propagation environment information from said server to said user terminal via the communication line.

~~The propagation environment notification method in a radio communication system according to Claim 1,~~ wherein said radio base station is configured as a plurality of radio base stations, and said second step comprises:

estimating a propagation environment for a radio wave emitted from each of said plurality of radio base stations in said user's area layout to generate individual radio wave propagation environment information;

using said individual radio wave propagation environment information to calculate a signal-to-interference ratio expressed by the ratio between the receipt electric power from targeted said radio base stations and the receipt electric power from non-targeted said radio base stations; and

generating said radio propagation environment information for estimating the possibility of communication in said user's area layout, based on said individual radio wave propagation environment information and said signal-to-interference ratio.

69. (Currently amended) A propagation environment notification system in a radio communication system constituted by a radio base station and a radio terminal, comprising:

condition sending means for sending conditions about the user's area layout from a user terminal to a server via a communication line;

information generating means for generating said user's area radio propagation environment information based on said conditions by said server receiving said conditions; and

information sending means for sending said radio propagation environment information from said server to said user terminal via the communication line,

~~The propagation environment notification system in a radio communication system according to Claim 16, wherein said radio base station is configured as a plurality of radio base stations, and said information generating means comprises:~~

individual radio wave propagation environment information generating means for estimating a propagation environment for a radio wave emitted from each of said plurality of radio base stations in said user's area layout to generate individual radio wave propagation environment information;

signal-to-interference ratio calculating means for using said individual radio wave propagation environment information to calculate a signal-to-interference ratio expressed by the ratio between the receipt electric power from targeted said radio base stations and the receipt electric power from non-targeted said radio base stations; and

communication possibility estimating means for generating said radio propagation environment information for estimating the possibility of communication in said user's area layout, based on said individual radio wave propagation environment information and said signal-to-interference ratio.

75. (Currently amended) A propagation environment notification system in a radio communication system constituted by a radio base station and a radio terminal, comprising:

condition sending means for sending conditions about the user's area layout from a user terminal to a server via a communication line;

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information generating means for generating said user's area radio propagation environment information based on said conditions by said server receiving said conditions; and

information sending means for sending said radio propagation environment information from said server to said user terminal via the communication line.

~~The user terminal according to Claim 31,~~ wherein said radio base station is configured as a plurality of radio base stations, and said information receiving means comprises:

individual radio wave propagation environment information generating means for estimating a propagation environment for a radio wave emitted from each of said plurality of radio base stations in said user's area layout to generate individual radio wave propagation environment information;

signal-to-interference ratio calculating means for using said individual radio wave propagation environment information to calculate a signal-to-interference ratio expressed by the ratio between the receipt electric power from targeted said radio base stations and the receipt electric power from non-targeted said radio base stations; and

communication possibility information receiving means for receiving said radio propagation environment information for estimating the possibility of communication in said user's area layout, based on said individual radio wave propagation environment information and said signal-to-interference ratio.

81. (Currently amended) A server for use in a propagation environment notification system in a radio communication system constituted by a radio base station and a radio terminal, comprising:

condition receiving means for receiving conditions about the user's area layout from a user apparatus via a communication line; and

information sending means for sending radio propagation environment information for said conditions to said user apparatus via the communication line,

~~The server according to Claim 46~~, wherein said radio base station is configured as a plurality of radio base stations, and said information sending means comprises:

individual radio wave propagation environment information generating means for estimating a propagation environment for a radio wave emitted from each of said plurality of radio base stations in said user's area layout to generate individual radio wave propagation environment information;

signal-to-interference ratio calculating means for using said individual radio wave propagation environment information to calculate a signal-to-interference ratio expressed by the ratio between the receipt electric power from targeted said radio base stations and the receipt electric power from non-targeted said radio base stations; and

communication possibility information sending means for sending said radio propagation environment information for estimating the possibility of communication in said user's area layout, based on said individual radio wave propagation environment information and said signal-to-interference ratio.

Allowable Subject Matter

The following is an examiner's statement of reasons for allowance:

1. The applicant amended per the examiner's recommendation, hence the claims are novel over the prior art of record in the examiner's opinion.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen M. D'Agosta whose telephone number is 703-306-5426. The examiner can normally be reached on M-F, 8am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bill Trost can be reached on 703-308-5318. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Stephen D'Agosta
12-17-2004



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